**Q-1. What is OOP? List OOP concepts.**

**Ans. OOP:**

* **OOP stands for Object-Oriented Programming.**
* Object-oriented programming (OOP) is a computer programming model that organizes software design around objects, or data, instead of logic and functions.

**OOP Concepts:**

1.Class

2. Object

3. Inheritance

- Single inheritance

- Multiple inheritance

- Multilevel inheritance

- Hierarchical inheritance

- Hybrid inheritance

4). Encapsulation/data binding

5). Polymorphism

- method overloading

- method overriding

6). Access specifier / modifier / data hiding

**Q-2. What is the difference between OOP and POP?**

|  |  |
| --- | --- |
| **OOP** | **POP** |
| Program is divided into objects. | Program is divided into functions. |
| Bottom-up approach. | Top-down approach. |
| Inheritance property is used. | Inheritance is not allowed. |
| It uses access specifier. | It doesn’t use access specifier. |
| Encapsulation is used to hide the data. | No data hiding. |
| Concept of virtual function. | No virtual function. |
| Object functions are linked through message passing. | Parts of program are linked through parameter passing. |
| Adding new data and functions is easy | Expanding new data and functions is not easy. |
| The existing code can be reused. | No code reusability. |
| use for solving big problems. | Not suitable for solving big problems. |
| Example: C++, java. | Example: C, Pascal. |